

1. A compound of the formula I

The chemical structure shows a benzene ring substituted with R₁, F, and Cl. This ring is connected to an amide group (-NH-CO-NH-). The second nitrogen of the amide is connected to a chain that includes a pyrrolidine ring substituted with R₃ and a carbonyl group with substituent X. The chain also features a five-membered heterocyclic ring with atoms A, B, D, and E, and a substituent R₂.

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10 R1, R2 are each independently H, F, Cl, Br, (C₁-C₆)-alkyl, CF₃, OCF₃, NO₂, CN, O-(C₁-C₆)-alkyl, COO(C₁-C₆)-alkyl, COOH, CO-(C₁-C₆)-alkyl, (C₀-C₆)-alkyl-COOH, (C₀-C₆)-alkyl -COO(C₁-C₆)-alkyl or SO₂-(C₁-C₆)-alkyl;

15 R3 is OH, (C₁-C₆)-alkyl, (C₀-C₆)-alkyl-aryl, O-(C₁-C₆)-alkyl, O-(C₂-C₆)-alkenyl or O-(C₂-C₆)-alkynyl, wherein said (C₁-C₆)-alkyl, (C₀-C₆)-alkyl-aryl, O-(C₁-C₆)-alkyl, O-(C₂-C₆)-alkenyl and O-(C₂-C₆)-alkynyl radicals are optionally mono- or polysubstituted by F, Cl or Br;

X is OH, O-(C₁-C₆)-alkyl, NH₂, NH(C₁-C₆)-alkyl or N((C₁-C₆)-alkyl)₂;

20 A, B, D and E are each independently CH or N, with the proviso that at least one of groups A, B, D and E is N;

m is 0, 1 or 2;

and pharmaceutically acceptable salts thereof.

2. The compound of Claim 1 wherein:

R1, R2 are each independently H, F, Cl, Br, (C₁-C₆)-alkyl, CF₃, OCF₃, NO₂, CN, O-(C₁-C₆)-alkyl, COO(C₁-C₆)-alkyl, COOH, CO-(C₁-C₆)-alkyl, (C₀-C₆)-alkyl-COOH, (C₀-C₆)-alkyl-COO(C₁-C₆)-alkyl or SO₂-(C₁-C₆)-alkyl;

R3 is OH, (C₁-C₆)-alkyl, (C₀-C₆)-alkyl-aryl, O-(C₁-C₆)-alkyl, O-(C₂-C₆)-alkenyl or O-(C₂-C₆)-alkynyl, wherein said (C₁-C₆)-alkyl, (C₀-C₆)-alkyl-aryl, O-(C₁-C₆)-alkyl, O-(C₂-C₆)-alkenyl and O-(C₂-C₆)-alkynyl radicals are optionally mono- or polysubstituted by F, Cl or Br;

X is OH, O-(C₁-C₆)-alkyl, NH₂, NH(C₁-C₆)-alkyl or N((C₁-C₆)-alkyl)₂;

A, B, D and E are each independently CH or N, with the proviso that at least one of groups A, B, D and E is N;

m is 1 or 2;

and pharmaceutically acceptable salts thereof.

3. The compound of Claim 2 wherein:

R1 is H or F;

R2 is each independently H, F, Cl, Br, (C₁-C₆)-alkyl, CF₃, OCF₃, O-(C₁-C₆)-alkyl, COO(C₁-C₆)-alkyl, COOH, CO-(C₁-C₆)-alkyl, (C₀-C₆)-alkyl-COOH, (C₀-C₆)-alkyl-COO(C₁-C₆)-alkyl or SO₂-(C₁-C₆)-alkyl;

R3 is OH, (C₁-C₆)-alkyl, (C₀-C₆)-alkyl-aryl, O-(C₁-C₆)-alkyl, O-(C₂-C₆)-alkenyl or O-(C₂-C₆)-alkynyl, wherein said (C₁-C₆)-alkyl, (C₀-C₆)-alkyl-aryl, O-(C₁-C₆)-alkyl, O-(C₂-C₆)-alkenyl and O-(C₂-C₆)-alkynyl radicals are optionally mono- or polysubstituted by F, Cl or Br;

X is OH, O-(C₁-C₆)-alkyl, NH₂, NH(C₁-C₆)-alkyl or N((C₁-C₆)-alkyl)₂;

A is N;

B, D, E are each CH;

5 m is 1 or 2;

and pharmaceutically acceptable salts thereof.

4. The compound of Claim 3 wherein:

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R1 is H or F;

R2 is H, Cl, (C₁-C₆)-alkyl, CF₃, COO(C₁-C₆)-alkyl or COOH,

15 R3 is H or phenyl;

X is OH, O-(C₁-C₆)-alkyl, NH₂, NH(C₁-C₆)-alkyl or N((C₁-C₆)-alkyl)₂;

A is N;

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B, D, E are each CH;

m is 2;

25 and pharmaceutically acceptable salts thereof.

5. A pharmaceutical composition comprising one or more compounds of Claim 1 and a pharmaceutically acceptable carrier.

30 6. The pharmaceutical composition of Claim 5 comprising at least one additional active ingredient.

7. The pharmaceutical composition of Claim 6 wherein said additional active ingredient is selected from the group consisting of:

antidiabetics, hypoglycemic active ingredients, HMG-CoA reductase inhibitors, cholesterol absorption inhibitors, PPAR gamma agonists, PPAR alpha agonists, PPAR alpha/gamma agonists, fibrates, MTP inhibitors, bile acid absorption inhibitors, CETP inhibitors, polymeric bile acid adsorbents, LDL receptor inducers, ACAT
 5 inhibitors, antioxidants, lipoprotein lipase inhibitors, ATP-citrate lyase inhibitors, squalene synthetase inhibitors, lipoprotein(a) antagonists, lipase inhibitors, insulins, sulfonylureas, biguanides, meglitinides, thiazolidinediones, α -glucosidase inhibitors, active ingredients acting on the ATP-dependent potassium channel of the beta cells, CART agonists, NPY agonists, MC4 agonists, orexin agonists, H3 agonists, TNF
 10 agonists, CRF agonists, CRF BP antagonists, urocortin agonists, β 3 agonists, MSH (melanocyte-stimulating hormone) agonists, CCK agonists, serotonin reuptake inhibitors, mixed serotonergic and noradrenergic compounds, 5HT agonists, bombesin agonists, galanin antagonists, growth hormones, growth hormone-releasing compounds, TRH agonists, uncoupling protein 2 or 3 modulators, leptin
 15 agonists, DA agonists (bromocriptine, Doprexin), lipase/amylase inhibitors, PPAR modulators, RXR modulators or TR- β agonists or amphetamines.

8. A method of reducing blood sugar comprising administering to a patient in need thereof a therapeutically effective amount of a compound of Claim 1.

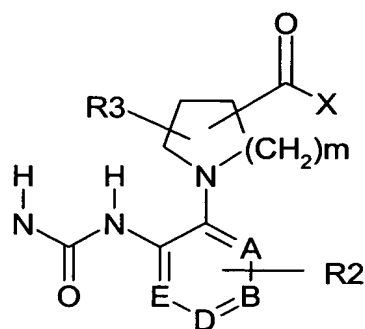
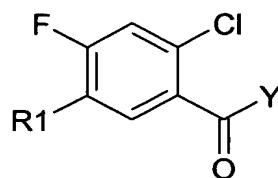
20 9. A method of treating type II diabetes comprising administering to a patient in need thereof a therapeutically effective amount of a compound of Claim 1.

10. A method of treating treating lipid and carbohydrate metabolism disorders comprising administering to a patient in need thereof a therapeutically effective
 25 amount of a compound of Claim 1.

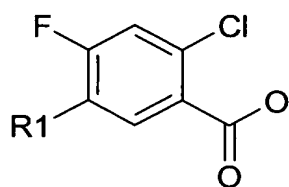
11. A method of treating arteriosclerotic symptoms comprising administering to a patient in need thereof a therapeutically effective amount of a compound of Claim 1.

30 12. A method of treating insulin resistance comprising administering to a patient in need thereof a therapeutically effective amount of a compound of Claim 1.

13. A process of preparing a compound of Claim 1, which comprises reacting ureas of the formula 2 with reactive acid derivatives of formula 4 selected from the group comprising acid chlorides and anhydrides:

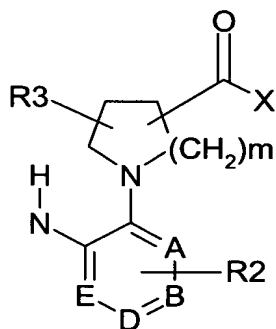
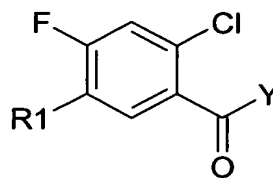
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5 wherein R1, R2, R3, A, B, D and E are as defined in claim 1 and Y is selected from the group comprising Cl or



wherein R1 is as defined above.

10 14. A process of preparing a compound of Claim 1, which comprises reacting an aniline derivative of the formula 3 with an aroyl isocyanate of the formula 4

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wherein R1, R2, R3, A, B, D and E are each as defined in Claim 1 and Y is NCO.